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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/904,568

DATE: 07/26/2001
TIME: 18:43:12

Input Set : A:\1272591.app
Output Set: N:\CRF3\07262001\I904568.raw

ENTERED

3 <110> APPLICANT: TREMBLAY, Johanne
4 HAMET, Pavel
5 LEWANCZUK, Richard
6 GOSSARD, Francis
8 <120> TITLE OF INVENTION: A Novel Hypertension Related Calcium Regulated Gene
9 (HcARG)
11 <130> FILE REFERENCE: 12725.9
✓C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/904,568
✓C--> 14 <141> CURRENT FILING DATE: 2001-07-16
16 <160> NUMBER OF SEQ ID NOS: 4
18 <170> SOFTWARE: PatentIn Ver. 2.1
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21 <211> LENGTH: 1100
22 <212> TYPE: DNA
23 <213> ORGANISM: Rattus rattus
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (132)..(803)
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32 ttggtttgta tttgtaatgc aactgtggtt aggaccttct ctccggactg gtcaagaaac 120
34 gggaagaaag gcatg tct gct ttg ggg gct gca gct cca tac ttg cac cat 170
35 Met Ser Ala Leu Gly Ala Ala Ala Pro Tyr Leu His His
36 1 5 10
38 ccc gct gac agt cac agt ggc cgg gtc agt ttc ctg ggt tcc cag ccc 218
39 Pro Ala Asp Ser His Ser Gly Arg Val Ser Phe Leu Gly Ser Gln Pro
40 15 20 25
42 tct cca gaa gtg acg gcc gtg gct cag ctc ttg aag gac tta gac agg 266
43 Ser Pro Glu Val Thr Ala Val Ala Gln Leu Leu Lys Asp Leu Asp Arg
44 30 35 40 45
46 agc acc ttc aga aag ttg ttg aaa ctt gta gtc ggg gcc ctg cat ggg 314
47 Ser Thr Phe Arg Lys Leu Leu Lys Leu Val Val Gly Ala Leu His Gly
48 50 55 60
50 aaa gac tgc aga gaa gct gtg gag caa ctt ggt gcc agc gcc aac ctg 362
51 Lys Asp Cys Arg Glu Ala Val Glu Gln Leu Gly Ala Ser Ala Asn Leu
52 65 70 75
54 tca gaa gag cgt ctg gcc gtc ctg ctg gcg ggc aca cac acc ctg ctc 410
55 Ser Glu Glu Arg Leu Ala Val Leu Leu Ala Gly Thr His Thr Leu Leu
56 80 85 90
58 cag cag gct ctc cgg ctg ccc cct gct agt cta aag cca gat gcc ttc 458
59 Gln Gln Ala Leu Arg Leu Pro Pro Ala Ser Leu Lys Pro Asp Ala Phe
60 95 100 105
62 cag gaa gag ctc cag gaa ctt ggc att cct cag gat cta att gga gat 506
63 Gln Glu Glu Leu Gln Glu Leu Gly Ile Pro Gln Asp Leu Ile Gly Asp
64 110 115 120 125
66 ttg gcc agt ttg gca ttt ggg agt caa cgc cct ctt ctc gac tct gta 554
67 Leu Ala Ser Leu Ala Phe Gly Ser Gln Arg Pro Leu Leu Asp Ser Val

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68                               130               135               140
70 gcc caa cag cag gga tcc tcg ctg cct cac gtg tct tac ttc cgg tgg 602
71 Ala Gln Gln Gln Gly Ser Ser Leu Pro His Val Ser Tyr Phe Arg Trp
72                               145               150               155
74 cgg gtg gac gtg gcc atc tca acc agc gct cag tcc cgc tcc ctg caa 650
75 Arg Val Asp Val Ala Ile Ser Thr Ser Ala Gln Ser Arg Ser Leu Gln
76                               160               165               170
78 ccg agt gtt ctc atg cag ctg aag ctc aca gat gga tct gca cac cgc 698
79 Pro Ser Val Leu Met Gln Leu Lys Leu Thr Asp Gly Ser Ala His Arg
80                               175               180               185
82 ttc gag gtg ccc ata gcc aaa ttt cag gag ctg cgg tac agt gta gcc 746
83 Phe Glu Val Pro Ile Ala Lys Phe Gln Glu Leu Arg Tyr Ser Val Ala
84 190                               195               200               205
86 ttg gtc ctt aag gag atg gca gaa ctg gag aag aag tgt gag cgc aaa 794
87 Leu Val Leu Lys Glu Met Ala Glu Leu Glu Lys Lys Cys Glu Arg Lys
88                               210               215               220
90 ctg cag gac tgactgaacc ctggtactgt ggggtgctgaa gctggtacca 843
91 Leu Gln Asp
93 gaacacagcc cccactggt gatgagccca actccattga ggtcctgcat gtgagaacgt 903
95 attttaagt aaaagacagc gggactttca ggttttgttt tatgagtcaa cagctgggca 963
97 ggggtggcaca gtttataatc tcagcccttg gaagtctgag gctggagaat gggaagtgt 1023
99 agctgggcct ggctttcata gtgaggctca gtgtcgaatt aaagaggtaa agcaactatt 1083
101 aaaaaaaaaa aaaaaaa 1100
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105 <211> LENGTH: 224
106 <212> TYPE: PRT
107 <213> ORGANISM: Rattus rattus
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111 1 5 10 15
113 Ser His Ser Gly Arg Val Ser Phe Leu Gly Ser Gln Pro Ser Pro Glu
114 20 25 30
116 Val Thr Ala Val Ala Gln Leu Leu Lys Asp Leu Asp Arg Ser Thr Phe
117 35 40 45
119 Arg Lys Leu Leu Lys Leu Val Val Gly Ala Leu His Gly Lys Asp Cys
120 50 55 60
122 Arg Glu Ala Val Glu Gln Leu Gly Ala Ser Ala Asn Leu Ser Glu Glu
123 65 70 75 80
125 Arg Leu Ala Val Leu Leu Ala Gly Thr His Thr Leu Leu Gln Gln Ala
126 85 90 95
128 Leu Arg Leu Pro Pro Ala Ser Leu Lys Pro Asp Ala Phe Gln Glu Glu
129 100 105 110
131 Leu Gln Glu Leu Gly Ile Pro Gln Asp Leu Ile Gly Asp Leu Ala Ser
132 115 120 125
134 Leu Ala Phe Gly Ser Gln Arg Pro Leu Leu Asp Ser Val Ala Gln Gln
135 130 135 140
137 Gln Gly Ser Ser Leu Pro His Val Ser Tyr Phe Arg Trp Arg Val Asp
138 145 150 155 160
140 Val Ala Ile Ser Thr Ser Ala Gln Ser Arg Ser Leu Gln Pro Ser Val

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141                               165                               170                               175
143 Leu Met Gln Leu Lys Leu Thr Asp Gly Ser Ala His Arg Phe Glu Val
144                               180                               185                               190
146 Pro Ile Ala Lys Phe Gln Glu Leu Arg Tyr Ser Val Ala Leu Val Leu
147                               195                               200                               205
149 Lys Glu Met Ala Glu Leu Glu Lys Lys Cys Glu Arg Lys Leu Gln Asp
150                               210                               215                               220
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155 <211> LENGTH: 1355
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
160 <221> NAME/KEY: CDS
161 <222> LOCATION: (295)..(966)
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168 gtccacacgg gacagggagc cccgctcggc tccgctccgc gctgaccttc aaggtctcgc 180
170 ggtttccccc cgcgccaccc ggacgccgac gaaagccagc gagctcctca gcctcaggca 240
172 tctgcacctg ggaccgacct cctgggctgg ctgatcaaag aggaagcagc agcaatg 297
173                               Met
174                               1
176 tct gct gtg ggg gct gca act cca tac ctg cat cat cct ggt gat agt 345
177 Ser Ala Val Gly Ala Ala Thr Pro Tyr Leu His His Pro Gly Asp Ser
178                               5                               10                               15
180 cac agt ggc cga gtg agt ttc ttg ggg gcc cag ctt cct cca gag gtg 393
181 His Ser Gly Arg Val Ser Phe Leu Gly Ala Gln Leu Pro Pro Glu Val
182                               20                               25                               30
184 gca gca atg gcc cgg cta cta ggg gac cta gac agg agc acg ttc aga 441
185 Ala Ala Met Ala Arg Leu Leu Gly Asp Leu Asp Arg Ser Thr Phe Arg
186                               35                               40                               45
188 aag ttg ctg aag ttt gtg gtc agc agc ctg cag ggg gag gac tgc cga 489
189 Lys Leu Leu Lys Phe Val Val Ser Ser Leu Gln Gly Glu Asp Cys Arg
190                               50                               55                               60
192 gac ggt gtg cag cgt ctt ggg gtc agc gcc aac ctg ccg gag gag cag 537
193 Asp Gly Val Gln Arg Leu Gly Val Ser Ala Asn Leu Pro Glu Glu Gln
194                               70                               75                               80
196 ctg ggt gcc ctg ctg gca ggc atg cac aca ctg ctc cag cag gcc ctc 585
197 Leu Gly Ala Leu Leu Ala Gly Met His Thr Leu Leu Gln Gln Ala Leu
198                               85                               90                               95
200 cgt ctg ccc ccc acc agc ctg aag cct gac acc ttc agg gac cag ctc 633
201 Arg Leu Pro Pro Thr Ser Leu Lys Pro Asp Thr Phe Arg Asp Gln Leu
202                               100                               105                               110
204 cag gag ctc tgc atc ccc caa gac ctg gtc ggg gac ttg gcc agc gtg 681
205 Gln Glu Leu Cys Ile Pro Gln Asp Leu Val Gly Asp Leu Ala Ser Val
206                               115                               120                               125
208 gta ttt ggg agc cag cgg ccc ctc ctt gat tct gtg gcc cag cag cag 729
209 Val Phe Gly Ser Gln Arg Pro Leu Leu Asp Ser Val Ala Gln Gln Gln
210                               135                               140                               145
210 130

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212 ggg gcc tgg ctg ccg cat gtt gct gac ttt cgg tgg cgg gtg gat gta 777
213 Gly Ala Trp Leu Pro His Val Ala Asp Phe Arg Trp Arg Val Asp Val 160
214 150 160
216 gca atc tcc acc agt gcc ctg gct cgc tcc ctg cag ccg agc gtc ctg 825
217 Ala Ile Ser Thr Ser Ala Leu Ala Arg Ser Leu Gln Pro Ser Val Leu 175
218 165 170 175
220 atg cag ctg aag ctt tca gat ggg tca gca tac cgc ttt gag gtc ccc 873
221 Met Gln Leu Lys Leu Ser Asp Gly Ser Ala Tyr Arg Phe Glu Val Pro 190
222 180 185
224 aca gcc aag ttc cag gag ctg cgg tac agc gtg gcc ctg gtc cta aag 921
225 Thr Ala Lys Phe Gln Glu Leu Arg Tyr Ser Val Ala Leu Val Leu Lys 205
226 195 200 205
228 gag atg gca gat ctg gag aag agg tgt gag cgc aga ctg cag gac 966
229 Glu Met Ala Asp Leu Glu Lys Arg Cys Glu Arg Arg Leu Gln Asp 220
230 210 215
232 tgaccctca cttgaccagt cccattcaga tccggcttgg acaggcacct gagatggtgc 1026
234 caaagtgcag ctgactcttc ccacgacagc cctggccttc ccatcaggca ggctcttcag 1086
236 tgagtgtttg aacgtaatta ttagtctttc tgtttaattg aaaaagagag ctatgccttt 1146
238 ttttcttttt ggaagtaaag cagctaaaac atgtttctat aggtgagtgt tggaccttca 1206
240 cacctcccct tccctgtaca tttgtctttg gtgctggacg tggccatgtg aggccaggtt 1266
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244 gtagatcttg tgtttcaggg agggcccg 1355
247 <210> SEQ ID NO: 4
248 <211> LENGTH: 224
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 4
253 Met Ser Ala Val Gly Ala Ala Thr Pro Tyr Leu His His Pro Gly Asp 15
254 1 5 10
256 Ser His Ser Gly Arg Val Ser Phe Leu Gly Ala Gln Leu Pro Pro Glu 30
257 20 25
259 Val Ala Ala Met Ala Arg Leu Leu Gly Asp Leu Asp Arg Ser Thr Phe 45
260 35 40
262 Arg Lys Leu Leu Lys Phe Val Val Ser Ser Leu Gln Gly Glu Asp Cys 60
263 50 55
265 Arg Asp Gly Val Gln Arg Leu Gly Val Ser Ala Asn Leu Pro Glu Glu 80
266 65 70 75
268 Gln Leu Gly Ala Leu Ala Gly Met His Thr Leu Leu Gln Gln Ala 95
269 85 90
271 Leu Arg Leu Pro Pro Thr Ser Leu Lys Pro Asp Thr Phe Arg Asp Gln 110
272 100 105
274 Leu Gln Glu Leu Cys Ile Pro Gln Asp Leu Val Gly Asp Leu Ala Ser 125
275 115 120
277 Val Val Phe Gly Ser Gln Arg Pro Leu Leu Asp Ser Val Ala Gln Gln 140
278 130 135
280 Gln Gly Ala Trp Leu Pro His Val Ala Asp Phe Arg Trp Arg Val Asp 160
281 145 150 155
283 Val Ala Ile Ser Thr Ser Ala Leu Ala Arg Ser Leu Gln Pro Ser Val 175
284 165 170

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286	Leu	Met	Gln	Leu	Lys	Leu	Ser	Asp	Gly	Ser	Ala	Tyr	Arg	Phe	Glu	Val
287				180					185						190	
289	Pro	Thr	Ala	Lys	Phe	Gln	Glu	Leu	Arg	Tyr	Ser	Val	Ala	Leu	Val	Leu
290				195					200						205	
292	Lys	Glu	Met	Ala	Asp	Leu	Glu	Lys	Arg	Cys	Glu	Arg	Arg	Leu	Gln	Asp
293		210					215					220				

VERIFICATION SUMMARY

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date